# Indoor Air Quality and New Carpet

### What You Should Know



This brochure was developed by a consensus process which included Federal and non-federal organizations and was sponsored by the U.S. EPA.

Past efforts to clean the air focused on pollution outdoors rather than indoors. Since many Americans spend most of their time inside buildings, there has been a growing concern about indoor air quality.

Sources of indoor air pollution range from dust, mold, and mildew to chemical emissions from common household products, appliances, furnishings, and building materials. Poor ventilation (lack of fresh air) allows pollutants to build up indoors. Polluted indoor air may cause some people to become ill.

Indoor air pollution at low levels is difficult to study. For most chemicals, research has not yet found whether low levels are likely to cause health problems. It is impossible to keep homes and other buildings free of all pollutants. However, it makes good sense to try to reduce exposure to pollutants, while enjoying the benefits of the many products that add to the overall quality of life.

As concern over indoor air pollution has grown, some questions have been raised about the relationship between carpet products and indoor air quality. The following are answers to some of the most frequently asked questions:

# What is new carpet's role in indoor air quality?

Like many other household products, new carpet can be a low-level source of chemicals that are emitted into the air. These chemical emissions, also called volatile organic compounds (VOCs), contribute to the total level of pollutants in a building.

It is important to remember that carpet is part of a total floor covering system that

may include the cushion and installation adhesives. The cushion and adhesives are also sources of emissions. Manufacturers of floor covering products are working to reduce emissions from their products.

# How do the emissions from carpet compare to emissions from other products?

Emissions from new carpet and cushions tend to be lower than emissions from many other construction and renovation materials. The emissions from adhesives used to install carpets can vary. New low-emitting adhesives are available that can greatly reduce emissions from new carpet installations.

New carpet is usually installed during home or office decoration, building construction, or renovation. Interior decorating usually includes the use of new materials such as wall treatments (painting, wallpapering, paneling), floor covering (carpet, vinyl, wood, ceramic), window covering (fabric, wood, plastic), and furniture. Any or all of these materials may produce chemical emissions and odors.

# Should I be concerned about chemical emissions from new carpet?

Limited research to date has found no link between adverse health effects and the levels of chemicals emitted by new carpet.

Some people report allergy- or flu-like symptoms that they believe are caused by newly installed carpet, however, such symptoms could also be attributed to other sources.

When new carpet is installed, it may produce an odor. All odors are caused by

chemicals - even food and flower odors. However, some people are more sensitive to odors than others. The presence of an odor following installation of new carpet does not mean there is a problem. While it may be unpleasant to some individuals, most people are not bothered by new carpet odor.

## What can I do to reduce my exposure?

The presence of some pollutants in buildings is unavoidable. However, increasing the amount of fresh air in the home or office may reduce exposure to pollutants. The Carpet and Rug Institute (CRI), a trade association, recommends that the ventilation system in public and commercial buildings be operated at maximum outdoor air flow before, during, and for 48 to 72 hours after the new carpet installation. In homes, you should leave doors and windows open, if possible, and use fans to increase the flow of outdoor air. It is important to provide adequate ventilation to maintain good indoor air quality.

To reduce exposure in homes, residents may wish to leave during the installation of new carpet. In the office, ask building managers to consider installing new carpet when the area is not in use.

#### STEPS TO TAKE .

#### You should:

- Plan ahead.
- Ask your carpet retailer for information on emissions from carpet.
- Ask for low-emitting adhesives if adhesives are needed.
- Be sure the retailer requires the installer to follow Carpet and Rug Institute installation guidelines.
- Be sure the ventilation system is in proper working order before installation begins.
- Open doors and windows, if possible, during and after installation. Consider using window fans, room air conditioning units, or other means to exhaust emissions to the outdoors.
- Operate the ventilation system with maximum outdoor air during and after installation for 48 to 72 hours.
- Consider leaving the premises during and immediately after carpet installation. You may wish to schedule the installation when most family members will be out of the house.
- Contact your carpet retailer if objectionable odors persist.
- Follow the manufacturer's instructions for proper carpet maintenance.

These key points, listed above, apply to carpet installations in all types of buildings. If you have questions about carpet, contact your retailer, building manager, or other responsible person.

#### Where can I get more information?

Individual manufacturers often provide brochures and other materials to help consumers better understand and take care of their new purchases. Government agencies, industry associations, and consumer groups are useful resources for more information on indoor air quality. You may wish to write or call these Government organizations for more information:

#### **U.S. Environmental Protection Agency**

TSCA Assistance Information Service (TS-799) 401 M Street, S.W. Washington, DC 20460 (202)554-1404

#### **U.S. Consumer Product Safety Commission**

Washington, DC-20207 1-800-638-2772

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Representatives from the following organizations have been working cooperatively to address indoor air quality issues and have participated in the development of this brochure:

American Federation of State, County, and Municipal Employees

American Fiber Manufacturers Association

American Lung Association

American Textile Manufacturers Institute

Carpet and Rug Institute

Carpet Cushion Council

Floor Covering Installation Contractors Association

Floor Covering Adhesive Manufacturers Committee of the National Association of Floor Covering Distributors

Georgia Tech Research Institute

National Institute of Standards and Technology

Styrene Butadiene Latex Manufacturers Council

The Adhesives and Sealants Council, Inc.

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